P152 Rising incidence and increasing severity of very early onset IBD in Ireland
R. Wylde1, A. Carey2.3, B. Bourke2.3.4, A. Broderick3, S. Quinn3, M. Hamzawi1, K. Gleseson1, S. Hussey2.3.4, 1Leiden University, Leiden University Medical Centre, Leiden, Netherlands, 2National Childrens Research Centre, NCRC, Dublin, Ireland, 3Our Lady's Childrens Hospital Crumlin, Dept. of Gastroenterology, Hepatology and Nutrition, Dublin, Ireland, 4University College Dublin (UCD), School of Medicine and Medical Science, Dublin, Ireland

Background: The literature describing the epidemiology and outcomes of very early onset IBD (VEO-IBD) is limited. This study examined the epidemiology, phenotype and clinical outcomes of a national cohort of Irish children with VEO-IBD from 2000 to 2012.

Methods: A retrospective review of all cases of VEO-IBD (those diagnosed <10 years of age) attending the National Centre for Paediatric Gastroenterology (NCPG) from January 2000 to December 2012 was undertaken. Patient demographics, diagnostic work-up, initial and subsequent treatment, and long term clinical and surgical outcomes at 1, 2, 5 and/or maximum clinical follow up were recorded. Cases were phenotyped according to the Paris classification and clinical activity was determined using PGA, PCDAI and PUCAI scores. Poisson regression analysis was used to calculate incidence trends.

Results: One hundred and fifty-eight children (50% male) with VEO-IBD were identified; 78 (49%) had Crohn Disease (CD), 63 (40%) had Ulcerative Colitis (UC) and 17 (11%) had IBD-unclassified (IBD-U). Median age of onset was 7.5 years (IQR 3.42 years). The incidence of VEO-IBD ranged from 0.8 to 3.3/100,000/year. The mean rate of increase was 4% per year (p = 0.06; CI 0%, 8%). The rate of increase was significant in males (p = 0.04) compared to females (p = 0.281). The incidence of UC increased strikingly from 0.6 to 1.6/100,000 (CI 0.025, 0.164) at an average annual rate of 9%. Pancolonic UC increased 4-fold from 0.6 to 2.3/100,000/year (p = 0.005). Using PUCAI scores, severe disease activity at presentation increased significantly from 0% to 36% (p = 0.002). The incidence of CD increased at a slower rate of 0.02/100,000/year (CI -0.41, 0.079). Significantly more males (44%) than females (18%) had both upper and lower disease activity (p = 0.03). 76% of patients with CD had inflammatory disease behaviour while 24% had strictureing or penetrating disease. At total of 31% of children presented with perianal disease. At one year follow up (n 148), 64% were in clinical remission, with 88 (59%) in steroid-free remission. Twenty-five (17%) children commenced immunomodulators within 1 year of diagnosis while 6 (4%) underwent surgery. At maximum follow up (n 154; median 60 months), 24 (16%) children had commenced biologics, 43 (28%) immunomodulators and 20 (13%) had undergone surgery (12 UC; 8 CD).

Conclusions: This is the first national population-based study describing the epidemiology and outcomes of VEO-IBD phenotypes. Boys had more extensive disease than girls. Substantial and sustained increases in the incidence and severity of UC in particular were observed. Prospective longitudinal studies are required to fully elucidate the factors underlying the aetiology and outcome of VEO-IBD.

P153 Reactivation of cytomegalovirus in inflammatory bowel disease – a 10 year case series
S. Fernandes1*, L. Correia1, A. Rota Goncalves1, A. Valente1, P. Moura Santos1, C. Baldaia1, N. Fatela1, P. Alexandrino1, M. Cortes2, J. Velosa1, 1Centro Hospitalar Lisboa Norte, Gastroenterology, Lisbon, Portugal, 2Centro Hospitalar Lisboa Norte, Internal Medicine, Lisbon, Portugal

Background: Cytomegalovirus (CMV) is responsible for severe infections in immunocompromised patients. Patients with inflammatory bowel disease (IBD) are frequently under immunosuppressive drugs and therefore at increased risk for CMV reactivation. The importance of this reactivation has not been established.

Methods: Hospital admissions between 2003 and 2013 were reviewed. Patients with IBD who reactivated CMV were selected.

Results: 34 patients (17 male), mean age 48 years (15–80) with a previous diagnosis of Crohn’s disease CD) (13) or Ulcerative Colitis (UC) (20) had reactivation of CMV. Most had extensive forms of disease (54% ileocolitis, 65% pancolitis) and moderate to severe activity (CDAI 288, Mayo 10). 85% were under at least one immunosuppressive drug (56% steroids). Reactivation was diagnosed by histology (79%), serology (9%) and serum or intestinal polymerase chain reaction (36% and 9%). All received treatment with ganciclovir. 8 (24%) required surgery (7 UC), 2 following toxic megacolon. Average time till surgery 213 days (0–698). 3 patients died (2 CD), 8 patients (30%) suffered a second CMV reactivation with 2 requiring surgery.

Conclusions: Immunosuppression increases the risk of reactivating CMV. In some cases of moderate to severe IBD CMV reactivation occurs, with high risk of complications. In our series antiviral therapy did not seem enough to halt the progression in severe forms of disease. Recurrence after treatment is common. Further controlled studies are needed to determine the actual contribution of CMV in acute exacerbations of IBD.

P154 Quality of life (QoL) and inflammatory bowel disease (IBD): The caregiver’s perspective
K. Argyriou1, A. Kapsoritakis1*, E. Tsakiridou2, S. Potamianos1, 1University Hospital of Larissa, Gastroenterology and Hepatology, Larissa, Greece, 2University of Thessaly, Medical School of Larissa, Larissa, Greece

Background: IBD are chronic relapsing conditions of the gastrointestinal tract that cause various changes in the daily life of the patients and of their family caregivers as well [1]. However, the effect of those changes on QoL has been extensiy studied only for the patients, leaving caregivers in the margin, despite that caregiving can be stressful and may contribute to serious illness and distress [2,3]. Aims of our study are to determine caregivers’ QoL and to study the effect of sociodemographic and clinical characteristics on their QoL.

Methods: Data were collected from the gastroenterology departments of the tertiary referral centre for IBD in Central Greece over a period of 17 months. Caregivers who were >65 years old, illiterate or had been suffering from any chronic debilitating disease were excluded from the study. QoL was measured with the Greek validated version of SF-36 questionnaire. Sociodemographic and clinical characteristics of the study population were also collected. Statistical analysis was performed with SPSS 17.0.

Results: One hundred and five IBD caregivers (48.4±12.3 years, 63.3% females, 78.09% first degree relatives, 59.04% high education, 20.9% unemployed) were recruited in the study. 59.04% of the caregivers were providing services on patients with active disease of moderate severity that was firstly
Among caregivers female sex, residence in rural areas, increased disease duration and disease severity were significantly correlated with low SF-36 mental domains scores whilst high educational level and employment status were significantly correlated with higher SF-36 score in the domains of emotional role functioning and of mental health.

Conclusions:
1. Family caregivers of IBD patients have impaired QoL;
2. Gender, Place of residence, Educational level, Employment status and Disease duration and severity has significant effect on caregivers’ QoL;
3. Interventions targeting caregiver’s mental health are expected to improve their QoL.

Reference(s)

P155
Quality Improvement Tool: 3 year outcome
S. Chadokufa1,*, B. Huggett1, F. Kiparissi2, V. Evans3, K. Lindley2, N. Shah2, M. Mamoun Elawad2, N. Acton2. 1Great Ormond Street Hospital, Paediatric Gastroenterology, London, United Kingdom. 2Great Ormond Street Hospital, Gastro, London, United Kingdom

Background: ImproveCareNow (ICN) is an Quality Improvement (QI) Program established in 2007. ICN uses patient data to drive improvements in the care and health of IBD patients. It’s a growing network of 57 international centres that benchmarks care against agreed targets: Clinical Remission and Steroid free remission and secondary targets of ensuring Adequate Nutrition and Growth, Disease Classification and Disease treatment. This is a report on 3 year experience of using the QI tool.

Methods: All eligible IBD patient enrolled in the program had their data collected at every clinic visit and were entered into an electronic database. Pre-visit planning meetings were held to discuss all patients prior to the clinic visit. The data that is entered consisted of diagnosis using the Paris classification, growth and nutrition, lab results, medications, physical assessments, disease activity and extra intestinal manifestation. Data from each visit was analysed and reports were generated within 24 hours. Weekly each patient’s results were stratified and scored so that individual treatment plans could be instigated. The IBD team analyse the reports on a monthly basis and implement changes to clinical management on an individualized basis but adhering to local policy. Monthly QI meetings set and review 90 day Goals enabling the team to strive for better results. All ICN teams meet biannually to discuss QI tools. Out of 263 IBD patients, 242 (139 male/102 female, current mean age 12.98 y) were recruited into the database. 37 patients classified as early onset IBD were excluded.

Results: See Table 1.

Table 1

<table>
<thead>
<tr>
<th>Key measures</th>
<th>Before 2011</th>
<th>After 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remission rate</td>
<td>60%</td>
<td>76%</td>
</tr>
<tr>
<td>Steroid free remission rate</td>
<td>50%</td>
<td>71%</td>
</tr>
<tr>
<td>Off prednisone</td>
<td>60%</td>
<td>92%</td>
</tr>
<tr>
<td>With satisfactory nutritional status</td>
<td>82%</td>
<td>97%</td>
</tr>
<tr>
<td>At risk of nutritional failure</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>In nutritional failure</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>With satisfactory growth status</td>
<td>92%</td>
<td>96%</td>
</tr>
</tbody>
</table>

P156
Pulmonary involvement in IBD patients and the effect of TNF-alpha inhibitors on pulmonary function
J. Bethge1,*, M. Eltrichmann1, C. Conrad1, S. Nikolau1, R. Noth1, D. Schuldt1, S. Zeissig1, S. Schreiber1,2. 1University Medical Center Schleswig Holstein, Campus Kiel, Medical Department I, Gastroenterology, Kiel, Germany, 2University Medical Center Schleswig Holstein, Campus Kiel, Medical Department I, Pneumology, Kiel, Germany

Background: Extraintestinal manifestations are a frequent complication in patients with Inflammatory Bowel Disease (IBD). Of note, increased mortality from respiratory diseases was observed in patients with ulcerative colitis (UC). This may be due to an overlap between genetic causes in IBD and various chronic inflammatory lung diseases. Therefore, pulmonary involvement may be overlooked in IBD patients. The aim of this prospective study was to assess pulmonary-function-abnormalities in IBD patients in comparison to healthy controls and investigate the effect of TNF-alpha-inhibitors on pulmonary-function-test (PFT).

Methods: 90 consecutive patients with IBD (51 Crohn’s disease (CD), 39 UC) were included: N = 47 in remission, N = 43 with active disease. Out of these, 25 patients were seen for initiating anti-TNF therapy. 40 matched healthy controls were